STATE OF VERMONT PUBLIC SERVICE BOARD

Docket No. 7032

Joint Petition of Vermont Electric Power Company,)
Inc., Green Mountain Power Corporation and the)
Town of Stowe Electric Department for a)
Certificate of Public Good, pursuant to 30 V.S.A.)
Section 248, authorizing the so-called Lamoille)
County 115 kV Project, consisting of the)
construction of a transmission line from Stowe to)
Duxbury, Vermont, and accompanying facilities)

INITIAL BRIEF OF THE TOWN AND VILLAGE OF WATERBURY

The Town and Village of Waterbury (together "Waterbury" or "Municipality") respectfully submit this brief in the above-captioned matter. We have limited our proposed findings and conclusions of law to only those issues in which the Municipality has an immediate interest.¹

I. Summary

The Petitioners—Vermont Electric Power Company, Inc., ("VELCO"), Stowe Electric Department ("SED"), and Green Mountain Power Corporation ("GMP")—seek approval to construct a new 9.4-mile, 115-kilovolt (kV) transmission line from Duxbury to Stowe. The line will run along the route of a 34.5 kV lines (the "3347"), owned by Green Mountain Power Company ("GMP"). The new 115-kV line will render the 3347 line unneeded between Duxbury and the GMP's switch on Blush Hill just south of the Waterbury Reservoir (the "Blush Hill Tap") and it—the 3347 line—will be removed. From the Blush Hill Tap north to Stowe, the new 115-kV line will run conjointly with GMP's 3313 line, a 34.5-kV line that will be relocated within the existing right-of-way. Associated with the new line will be a new substation in Stowe, an upgrade of the existing substation in Moretown, and related changes affecting the 3313 line. The lion's share of the new line, roughly six and a half miles, will pass through Waterbury. The Petitioners refer to the proposal as the Lamoille County Project ("LCP"), despite the fact that most of it will be located in Washington County.

Waterbury urges the Board to find that the Lamoille County Project, as proposed, does not meet several of the requirements of 30 VSA §248. These failures warrant the Board's

¹ This brief and the reply to follow are also intended to satisfy the Municipality's rights to comment on the petition accorded to it under 30 VSA §§248(a)(4)(C), (b)(1), and (f). Please refer to our letter of 15 July 2004.

² Refer to VELCO exhibits KSM-2, KSM-3, and KSM-4 for a fuller description of the proposal.

rejection of the project or, in the alternative, approval with specific conditions to remedy its deficiencies. Our reasoning, its factual bases, and our recommendations are set out in detail in the sections that follow.

II. Proposed Findings of Fact

A. General

- 1. Demand for electric power in the so-called Lamoille County Study Area ("LCSA") has been growing steadily for decades and is projected to grow at an average compound annual rate of 1.69 percent between December 2004 and December 2021. From 2005 to 2015, the average compound annual rate of growth will be 2.3%. Exh. KSM-2 (at 3);³ Allen pf. at 14.
- 2. The LCSA is bounded by East Fairfax, Middlesex, Irasburg, Commerford, and Montpelier. The utilities serving this area are GMP, Central Vermont Public Service Corporation ("CVPS"), Washington Electric Cooperative, Vermont Electric Cooperative, the electric departments of the Towns of Stowe and Hardwick, and the electric departments of the Villages of Morrisville, Hyde Park, and Johnson. This area is part of a larger area in central Vermont that is served by a network of 34.5 kV transmissions lines that historically has been known as "the Northern Loop." The 34.5 kV lines of the Northern Loop describe a broad circle that runs from Berlin to Middlesex, Duxbury, Waterbury, Stowe, Morrisville, Wolcott, Marshfield, Plainfield, Montpelier, and back to Berlin. Exh. KSM-2 (at ii); tr. 7/6/05(a) at 10.4
- 3. There have been long-standing concerns (going back at least 15 but perhaps as many as 35 years) about the ability of the electric system to reliably serve loads in the LCSA. Loads in the area have exceeded 40 MW for a number of years and have been threatening reliability since at least 2001.⁵ During winter 2004-2005, the peak coincident load in the area was approximately 74 MW. Loads currently exceed 40 MW for more than 60% of the year. Machia pf. at 3-4; Hinners pf. at 3-6; Smith pf. at 5; tr. 7/6/05(a) at 90-91; tr. 7/6/05(b) at 22-23, 85; tr. 7/7/05(b) at 56; tr. 7/18/05 at 15.
- 4. The transmission system serving the LCSA can serve the current loads (coincident peak of 74 MW) so long as key components of the system are functioning. If any of those facilities—specifically the East Fairfax tie belonging to Central Vermont Public Service Corporation ("CVPS") or GMP's 34.5-kV line (the 3313) running from Middlesex to Stowe—is lost, the system is at risk of voltage collapse. Tr. 7/6/05(a) at 10-11.
- 5. The LCSA today, with "all lines in," can maintain acceptable voltage levels but is at risk for the loss of either its East Fairfax or Middlesex source. The evidence is not

³ A simple arithmetic manipulation of the forecast data in the table on page 3 of exh. KSM-2 yielded the figure of 1.69%. At an annual compound rate of increase of 1.69%, 74.1 MW will grow to 98.6 MW in seventeen years.

⁴ References to the transcripts of the hearings in this docket follow the page numbering of the electronic versions (which, presumably, match those of the printed versions).

⁵ Coincident peak load in the area was approximately 74 MW in the winter of 2004-2005. Allen pf. at 12. Assuming an average annual compound rate of growth of two percent per year, loads first exceeded 40 MW in roughly 1974. At three percent, the threshold was exceeded ten years later, in 1984. In either case (each within the range of actual Vermont load growth during the period), the problem long antedated VELCO's official and relatively recent courtship with it.

clear that maintenance of acceptable voltage levels in the event of a loss of either the East Fairfax or Middlesex source would require that the 34.5-kV system serving the LCSA bear no more than peak coincident loads of 40 MW. Exh. KSM-2 at iii; Allen pf. at 12; Smith pf. at 9 (lines 7-18); tr. 7/7/05 at 46-47; tr. 7/18/05 at 15-17.

6. The Petitioners assumed that, in order to defer or eliminate the need for the LCP, the area loads served by the 34.5-kV transmission system need to be constrained at or below 40 MW. Exh DWG-2; tr. 7/6/05(a) at 14-15.

B. Need, Economic Benefit, and Integrated Resource Planning

- 7. Growth in demand for energy services, particularly in Stowe, is a critical factor driving the need for new investment in the LCSA. Exh. KSM-2 at 3; Machia pf. at 3.
- 8. The LCP is expected to safely and reliably serve projected LCSA loads until 2021. The nature of new investment necessary to serve loads after that time is not now known. Tr. 7/6/05(a) at 11-15; tr. 7/6/05(b) at 94-95.
- 9. The electric distribution utilities that jointly serve the LCSA have not invested in all cost-effective end-use energy efficiency resources in their service territories. In particular, there has been under-investment in those efficiency measures that can be most cost-effectively captured at particular times, e.g., during new construction or remodeling, and may not be cost-effective for retrofitting. Such measures are referred to as "lost opportunities." Tr. 7/18/05 at 22-23, 118-119, 122-123.
- 10. Estimates of energy-efficiency resources that can be acquired through retrofits are, at best, very rough approximations of the lost opportunity savings that were missed. Not all lost opportunities can be cost-effectively captured as retrofits. Tr. 7/18/05 at 122-123.
- 11. The failure to invest in all cost-effective end-use energy efficiency in the LCSA has contributed to the need for the LCP. Findings 7 and 9.
- 12. Serious consideration of opportunities for installation of combined heat-and-power facilities in the study area, including at the Stowe Mountain Resort, was not given by the Petitioners. The US Department of Energy estimated that as much as 18 percent of Vermont's current electric load could be served by CHP. In the LCSA, this would amount to a little more than 12 MW of demand. Tr. 7/18/05 at 30-31.
- 13. Until May 2005, Stowe Electric Department did not consider the impacts that growth in demand in its service territory would have on the bulk transmission system serving it and the LCSA region. In determining whether to issue "ability to serve" letters for new development in Stowe, SED considered only whether its own system, i.e., the utility plant in its service territory, would be capable of meeting the increased demands. During fifteen years ending in May 2005, no new development in Stowe was denied an ability-to-serve letter. Tr. 7/6/05(b) at 46, 86-89, 91-93.

C. System Stability and Reliability

- 14. Alternative resource mixes to reduce sustained peak loads on the transmission system serving the LCSA to lower levels, though not as low as 40 MW, were not analyzed by the Petitioners. Exh. KSM-2; Finding 6.
- 15. The single-pole, double circuit configuration proposed by the Department of Public Service will not degrade the reliability of the LCP to an unacceptable level. The increased risk of the loss of both the 34.5-kV and 115-kV circuits on a single-pole

configuration between the Blush Hill Tap and Stowe is minimal and acceptable. Smith pf. at 16-20; Smith surreb. pf. at 1-8.

16. If the LCP is constructed (as proposed or as modified according to the recommendations of DPS witnesses), it is unlikely that an upgrade to the 115-kV will be necessary before 2035 or after. Tr. 7/7/05(b) at 86-90.

D. Aesthetics, Historic Sites, Environmental Impacts, and Public Health and Safety

- 17. The LCP, as proposed, will create undue adverse aesthetic impacts in some locations. Exh. DPS-DR-1 at 1.
- 18. The aesthetic impacts of the LCP will be mitigated if the double-circuit, double-pole configuration from the north side of the Waterbury Reservoir to mile 8.2 in Stowe is changed to a single-pole, double-circuit configuration. Exh. DPS-DR-1 at 24-28; Smith pf. at 16-20; Smith surreb. pf. at 2.
- 19. A 34.5 kV line, belonging to GMP and referred to as the 3312 line, runs from Duxbury north along the western, uninhabited side of Blush Hill to GMP's Little River Substation at the Waterbury Reservoir Dam. From there, another GMP's 34.5-kV line (3313) winds east to the Blush Hill Tap, where it connects with the 3347 line. Running the 115-kV line along the routes of the 3312 and 3313 lines and leaving the 3347 line intact will create fewer aesthetic impacts than will the LCP as proposed. Exh. KSM-4; exh. DPS-DR-1 at 15, 18.
- 20. If the 115-kV is to be run along the current right-of-way of the 3347 line on Blush Hill, the undue adverse aesthetic impacts that it will cause between mile 2.0 and mile 2.8 are likely to be better mitigated by a rerouting farther to the east and at a lower elevation than that proposed by the Petitioners. Evaluation of this alternative is merited. *Id.* at 17; tr. 7/8/05(a) at 67-77.
- 21. The lines' aerial crossing of the Waterbury Reservoir creates an undue aesthetic impact. This impact can be mitigated by burying the cables beneath the Reservoir. Exh. DPS-DR-1 at 18-24; tr. 7/8/05(a) at 84.
- 22. The water level in the Reservoir is currently very low. The Reservoir was drained in 2000 to enable reconstruction work on the Waterbury Reservoir Dam. That work was scheduled to be completed in 2005. Exh. DPS-DR-1 at 20.
- 23. The LCP provides a unique opportunity to bury the new cables beneath the Reservoir. Tr. 7/8/05(a) at 85-86, 121-123.
- 24. The Reservoir is an important natural resource and recreational environment in central Vermont. When the Reservoir is full, approximately 60,000 people visit it and the Little River State Park each year. Exh. DPS-DR-1 at 4, 19; tr. 7/18/05 at 52-53.
- 25. The incremental cost to the Project to install submarine cables beneath the Reservoir is estimated to range between \$4.1 and \$5.9 million. Smith pf. at 23; tr. 7/7/05 at 86.
- 26. No allocation of the incremental cost of submarine cables as an alternative to the allocation currently proposed was considered. Tr. 7/18/05 at 11.

⁶ Newspaper articles, not in evidence in this case, have reported that the Dam's repairs will likely not be completed until 2006.

27. Rerouting the proposed line from mile 4.0 to mile 5.7, as proposed by the Gregg Hill Residents, would mitigate the adverse aesthetic impact of the LCP in this area. Tr. 7/8/05(b) at 38-39, 45-46.

E. Environmental Impacts

- 28. GMP currently owns the rights-of-way along which the 115-kV line of the LCP will run. GMP does not use herbicides as part of its right-of-way ("ROW") vegetation management procedures. Tr. 7/18/05 at 168.
- 29. The targeted (not broadcast) application of herbicides is one method, of several, that VELCO employs to manage vegetation in its rights-of-way. The herbicide it uses is the same as that found in the commercially available product *Round Up. Id.* at 169-171.
- 30. VELCO provides notice to abutting landowners prior to its use of herbicides. Landowners are given an opportunity to express their concerns, if any, about the use of herbicides on or near their property. VELCO officials work with landowners to devise mutually satisfactory approaches to the use of herbicides and vegetation management. *Id.* at 134-135, 172.
- 31. A small percentage of VELCO's current rights-of-way abut the properties of residential landowners. *Id.* at 167.
- 32. For most its route between Duxbury and Stowe, the 115-kV line of the LCP will abut the properties of residential landowners. Exh. KSM-2; exh. Portz/Boyle-3; exh. DPS-DR-1.

III. Discussion and Conclusions of Law

Section 248(a)(2) of Title 30 requires that "no company, as defined in section 201 of this title, . . . may begin site preparation for or construction of an electric generation facility or electric transmission facility within the state which is designed for immediate or eventual operation at any voltage, . . . unless the public service board first finds that the same will promote the general good of the state and issues a certificate to that effect." Before it can conclude that a particular proposal will promote the general good of the state, the Board must test the proposal against specific criteria enumerated in Section (b) of the statute.

In several important respects, the Lamoille County Project, as proposed, does not meet the requirements of 30 VSA §248. These failures warrant its rejection or, in the alternative, approval with specific conditions to remedy its shortcomings. Our arguments and recommendations are set out in relief against the applicable criteria below.

A. 30 VSA §248(b)(1): Orderly Development of the Region

The evidence in this docket demonstrates that demand for electricity in the LCSA has grown significantly over the past two decades and that this growth is expected to continue during the period under study (2005 to 2021). This, in and of itself, is an indicator of the region's economic vitality and is an argument for increased investment in utility infrastructure in the area.

⁷ 30 VSA §248(a)(2)(A) and (B).

The Town and Village of Waterbury well understand the importance of a safe and reliable electric system, and are supportive of reasonable investments in new plant to serve the area's need. Given current and expected loads in the LCSA, no party contests the assertion that new investment is needed to support orderly development in the region. The nature of that investment is, however, a matter of some debate, and, for reasons articulated in the following sections, the Town and Village urge the Board to find that the LCP, as proposed, will "unduly interfere with the orderly development of the region" unless it is altered in specified ways.

B. 30 VSA §248(b)(2), (4), and (6): Need, Economic Benefit, and Least-Cost Planning

Although §248 differentiates among the three criteria of need, economic benefit, and consonance with the dictates of least-cost planning, they are in fact closely interrelated. Conclusions with respect to each are dependent upon the same sets of facts, and the reasoning that leads to conclusions about one necessarily leads to similar conclusions about the others.

Pursuant to §248(b)(2), the Board must find that the LCP "required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy-efficiency and load management measures, including but not limited to those developed pursuant to the provisions of sections 209(d), 218c, and 218(b) of this title." This provision's invocation of the cost-effectiveness test establishes that "need" is, at its core, an economic standard: which is to say that a particular proposal is not *needed* if the loads that it will serve can in fact be served by some other, less costly investment or combination of investments (that, of course, likewise satisfy the other substantive criteria of the statute). All else being equal, the less costly means of meeting the need must be the preferred.

Section 248(b)(4) requires that a proposal "will result in an economic benefit to the state and its residents." The lack of comparatives or superlatives in this provision suggests that it may be broadly construed. It does not say, for instance, that a proposal must result in the *greatest* economic benefit from among the alternatives, only that it must provide some kind of economic benefit. However, given that §248(b)(2) and (6) relate compliance to least-cost integrated planning as defined in 30 VSA §218c, which mandates that regulated companies meet the public's need for energy services "at the lowest present value life cycle cost, including environmental and economic costs," it would be absurd to treat §248(b)(4) as if it were a license to opt for a proposal whose expected benefits are less than those of suitable alternatives.

Section 248(b)(6) requires that a proposed project be "consistent with the principles for resource selection expressed in that company's approved least cost integrated plan." Historically, the PSB has not directed VELCO to develop a least-cost plan because the company is "a non-distribution company whose capital expenditures are already subject

to Board review." The lack of a least-cost plan is not, however, fatal to a proposal. As the Board noted in its order in Docket 6860, "when utilities do not have approved integrated resource plans, the Board evaluates projects under Section 248(b)(6) according to their consistency with the principles of least-cost integrated planning."

Taken together, these three criteria necessitate that a project be the environmentally and economically least-cost means of meeting present and future demand for energy service, while satisfying other operation and reliability requirements. That burden is, appropriately, heavy. The evidence in this docket demonstrates that the burden has not been met.

The Board's final order in Docket 5270, issued on April 16, 1990, and affirming legislation that followed (30 VSA §218c) require that Vermont's electric utilities acquire all cost-effective end-use energy efficiency resources in their service territories. The record in this case establishes that, since April 16, 1990, the utilities that will be served by the LCP have failed to invest in all cost-effective end-use energy efficiency resources in their service territories. ¹⁰ Finding 9. In particular, lost opportunity resources—those that are most economically captured during new construction and remodeling—have been foregone. The magnitude of these lost savings is not known, but it must include some amount that is incremental to the available retrofit resource, i.e., those lost opportunities that cannot be cost-effectively acquired through retrofitting. Finding 10.

The most immediate consequence of these facts is that loads in the LCSA are higher today than they should be and that the need for the LCP has been, at best, accelerated and, at worst, created when it might have been avoided altogether by a more rigorous application of the principles of least-cost planning by the affected utilities. Stowe Electric Department's persistent failure to consider the greater system-wide impacts of new development in its service territory was particularly egregious. Finding 13. It myopically handed out ability-to-serve letters like candy on Halloween, whose rotting properties are almost always crowned in brute remediation. The LCP too seems a fix that foresight and preventative care might have avoided. For all this, the total costs of energy service in Stowe and the surrounding territories will be higher than they rightly should be.

The Petitioners argue that the need for the LCP is dire, that the ability of the grid to endure a contingency has been compromised by the high loads in the area. They assert

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⁸ Docket No. 5778, Order of 3/12/96 at 22, cited in Docket No. 6860, Order of 1/28/05 at 60.

⁹ Docket No. 6860, Order of 1/28/05 at 61.

¹⁰ The utilities' culpability is not mitigated by the fact that, since 2000, primary responsibility for the acquisition of end-use energy efficiency resources in the state has belonged to *Efficiency Vermont*, an independent organization created by the Public Service Board with this only mission. The utilities remain bound by §218c, which obligates them to invest in the least-cost (on a total life-cycle basis, including external environmental costs) mix of resources, which must of necessity include demand-side resources if they are less costly than the supply-side resources they avoid. Section 209(d)(2) gives the Board discretion to determine whether the investments made by the energy efficiency utility "satisfies a utility's corresponding obligations, in whole or in part, under section 218c of this title and under any prior orders of the board." If there were, as the evidence in this docket establishes, cost-effective energy efficiency resources in their service territories in addition to those already acquired or targeted by *Efficiency Vermont*, the utilities were still obliged to see that they were invested in.

that sustained peak loads must be dropped to 40 MW, which they contend is not possible in the time left before reliability can no longer be reasonably assured, or that the LCP must be built. But, given the fact that the existing 34.5-kV system has served sustained loads in excess of 40 MW, though not as high as 74, for many years, it is reasonable to inquire why resource alternatives to the Petitioners' either-or have not been seriously considered. No satisfactory explanation has been given as to why targeted investment in end-use energy efficiency to reduce LCSA sustained loads to intermediate levels, e.g., 50-60 MW, which have been reliably served by the existing transmission system, should not be pursued first, thereby generating immediate savings for the area's homes and businesses and giving VELCO and the state's retail electric companies sufficient time to develop a truly integrated least-cost strategy for best meeting the area's needs over the long term. Findings 3-5. The Petitioners' analysis presumed that the 40 MW-threshold was inviolate and, consequently, that any resource alternative that violated it was automatically disqualified. Finding 14. But two decades' experience, if not belying the condition, at least calls it into serious question. The Board should direct the Petitioners to evaluate such alternatives to determine whether they can cost-effectively defer the need for the LCP or even render it non-cost-effective in relation to a longer-term strategy of demand-side and distributed resource investments.

Of course, the Board might conclude that the LCP is now needed, in despite of these arguments. If so, then as a condition of approval the Board should direct the Petitioners to submit a detailed plan for how they intend to meet long-term demand for service in the LCSA. The evidence in this docket establishes that the LCA will reliably serve area loads until 2016 or, at best, 2021. Finding 8. While a prediction of demand for electricity fifteen years hence is fraught with uncertainty, it is somewhat disconcerting that the Petitioners have only the vaguest of ideas about the resource needs that will follow. Finding 8. Indeed, it is this uncertainty that counsels for a continued and vigorous planning effort. There is no reason that the ratepayers served by the Northern Loop should find themselves in thirteen years confronted, as they do today, with an alleged reliability crisis that might have been prudently avoided. The energy efficiency resources that have been so far neglected, and whose magnitude and value will only increase along as does the region's demand, will not, even with the LCP, lose their economic allure.

In its recent order on the so-called Northwest Reliability Project ("NRP") in western Vermont, the Board wrote:

The same time constraints that dictate the approval of the proposed Project have also led us to conclude that we must open an investigation into VELCO's least-cost planning, as we stated in Section II.A of today's Order. Waiting to evaluate non-transmission options until it is too late to implement them represents neither sound public policy nor good utility planning practice.

We are also concerned that even a timely consideration of demand-side options will be of little effect if there is no entity charged with their implementation. Under current Vermont laws and policies, there appears to be an "efficiency gap"

in which distribution utilities are relieved of their obligations to pursue all cost-effective efficiency investments on the condition that they cooperate in good faith with the Energy Efficiency Utility. However, the Energy Efficiency Utility, because of the statutory cap on its funding as set in 30 V.S.A. § 209(d)(4), is not provided with the funding necessary to make all cost-effective energy efficiency investments. Nor has VELCO stepped forward to fill that gap, citing instead a decade-old decision of this Board accepting an uncontested proposal that, at that time, did not require VELCO to prepare or implement a least-cost integrated plan. ¹¹

The institutional shortcomings that are contributing to the asserted need for the LCA are precisely those that provoked the massive 345-kV NRP, writ small. Already twice this decade, Vermont has been asked to accept unappealing and costly solutions to problems that were well-understood many years in advance but whose more elegant and economic treatments were plainly ignored. Waterbury and its residents will bear the brunt of this failure. This must not be allowed to happen again, to this municipality or any other. ¹²

For all these reasons, Waterbury urges the Board to take the following actions:

- Deny the petition and direct the Petitioners to evaluate the feasibility and costeffectiveness of alternatives to the LCP that do not assume that sustained loads served by the 34.5-kV Northern Loop system must be constrained to 40 MW.
- If the Board does not accept the first recommendation, then approve the petition with conditions. Those conditions should include the following:
 - O Directives to the affected utilities and VELCO to assure that investment in comprehensive end-use energy efficiency measures in the LCSA is begun immediately. Such investment should be sustained, aggressive, and, above all, comprehensive. The Petitioners should be put on notice today that no new supply-side resources will be prematurely approved if there is any evidence of a failure to invest in all cost-effective demand-side resources first.
 - O A commitment by VELCO and the affected utilities not to propose before 2055 any upgrade to the 115-kV transmission line component of the LCA that would (i) allow for any increase in the capacity of the line, as measured in kilovolts, unless such increases can be achieved with no physical changes to the wires or poles, (ii) require a widening of the existing right-of-way, or (iii) increase either the number or height of the

¹¹ Docket 6860, Order of 1/28/05 at 58-59. We note that the statutory cap on the energy efficiency utility's budget has since been lifted by the legislature. S.52, signed into law this spring, gives the Board authority to set *Efficiency Vermont*'s budget at a level sufficient to "in order to realize all reasonably available, cost-effective energy efficiency savings" in the state. It remains to be seen whether the actual level set will support such comprehensive investment. Although the existence of the efficiency utility may have had the effect of relieving distribution utilities "of their obligations to pursue all cost-effective efficiency investments," for the reasons stated above and in footnote 10, we respectfully disagree that it did in fact relieve them of those obligations.

¹² We take some small comfort from the Board's statements in its 1/28/05 order in Docket 6860, at 11 and in Paragraph 21 of the order itself (at 228) that suggest that it will, in the future, more scrupulously hold the utilities and VELCO to their obligations under the law.

line's poles (unless required by safety considerations or is found by the Board to improve the environmental or aesthetic impacts of the line).

C. 30 VSA §248(b)(3): System Stability and Reliability

The evidence presented by the Petitioners demonstrates that the LCP will improve system stability and reliability. The record is insufficient, however, to establish whether there are alternatives to the proposal, such as end-use efficiency investments and distributed generation, to reduce current loads by approximately 25-30 percent (from, say, 74 MW to 50 MW), that will assure acceptable levels of stability and reliability. Finding 14. If, instead of denying the petition and directing the Petitioners to evaluate alternative resource options (as recommended above), the Board decides to approve the LCP, it should order that the originally proposed double-pole, double-circuit configuration of the lines from the Blush Hill Tap to the new substation in Stowe be discarded in favor of the single-pole, double-circuit configuration recommended by the Department of Public Service. This configuration, for reasons set out in the following section, is both aesthetically preferable and operationally acceptable. Finding 15.

D. 30 VSA §248(b)(5): Aesthetics, Historic Sites, Environmental Impacts, and Public Health and Safety

Section 248(b)(5) requires that an in-state facility "not have an undue adverse effect on esthetics, historic sites, air and water purity, the natural environment and the public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. § 1424a(d) and § 6086(a)(1) through (8) and (9)(K)." The evidence in this case supports recommendations as to how the LCP should be modified to mitigate the undue adverse aesthetic and environmental impacts that it will have if approved as proposed.

Specifically, Waterbury supports the recommendations of David Raphael of Landworks, Inc., witness on behalf of the Department of Public Service. Waterbury urges the Board, if it approves the project, to direct the Petitioners to modify it in the following ways:

- For that stretch of ROW where the Petitioners propose that GMP's 34.5-kV 3313 line and the proposed 115-kV line run side-by-side in a double-pole configuration, the lines should instead run together in a single-pole design. This will necessitate, in certain places, taller poles than would be required for the 115-kV line alone, but the aesthetic trade-off favors this overall reduction in the mass of the structures supporting the lines.
- In a post-certification process, the Petitioners should re-evaluate the potential for running the 115-kV line along that part of the route between Duxbury and the Blush Hill Tap that GMP's 3312 and 3313 lines currently use. Under this alternative, the 3347 line would remain in place, and the 3312 and 3313 lines between Duxbury and the Blush Hill Tap would be removed. This would mean that there would be no changes to the 3347 line south of the Tap, thus leaving the residential properties abutting the 3347 line along Blush Hill unaffected by the LCP.

- The Board should direct the Petitioners to evaluate and adopt, if feasible and reasonable in cost, DPS witness Raphael's recommended rerouting of the proposed 115-kV line from mile 2.0 to 2.8 on Blush Hill. Finding 20.
- The Board should direct the Petitioners to modify the LCP so that both the 34.5-kV and 115-kV lines run beneath the Waterbury Reservoir rather than above it, as the 34.5 line currently does. The LCP provides a unique opportunity to remove an aesthetic blemish on the Reservoir, which is a major recreational asset in Central Vermont. Finding 24. We recognize that this submarine proposal will add an estimated 20-25% to the cost of the project but, given that the Reservoir is a popular destination for thousands of visitors annually and that the lines will be in place for many years to come, we believe that the incremental cost is a small price to pay for such an aesthetic benefit. We would recommend also that, in the post-certification process, the Board and the parties to consider a state-wide allocation of the submarine-ing costs—that is, a proportional sharing of the costs among all the distribution utilities served by VELCO—as a more equitable means of reflecting the state-wide value of the Reservoir. If the Board does not direct the Petitioners to bury the cables, we recommend that it adopt their (far less desirable) proposal to remove all marker balls from the aerial lines.

Waterbury also supports the rerouting of the lines as proposed by the Gregg Hill Residents. The Municipality recognizes that this proposal involves the clearing, for a short distance, of a new right-of-way through state lands and that the state, through the Agency of Natural Resources ("ANR"), opposes the proposal. We recommend that the Board, if it approves the LCP, direct the parties to fully explore the Gregg Hill proposal in a post-certification process. There may be an ROW through the state lands that is acceptable to ANR or, if not, yet be means of facilitating a significant portion of the reroute, which will place the lines farther to the east and behind the homes of the several Gregg Hill residents.

E. 30 VSA §248(b)(7): Compliance with the State's Electric Energy Plan

For the reasons set out in Section B, *Need, Economic Benefit, and Least-Cost Planning*, above, Waterbury does not believe that the LCP is in compliance with the state's electric energy plan.

F. 30 VSA §248(b)(8) and (9): Outstanding Water Resources and Waste-to-Energy Facilities

These sections of the statute do not apply to the Lamoille County Project.

¹³ An agreement on the allocation of the LCP's costs among the state's utilities is not a prerequisite for moving the project forward. Tr. 7/6/05(b) at 96. As for Mr. Raphael's recommendation that the lines be run beneath the Reservoir, the Department of Public Service does not support it. The DPS objects to the proposal of its own witness because it would impose too great an added cost burden upon the small utilities that will be paying the largest shares of the total LCP cost. However, when asked, DPS witness Allen admitted that the Department had not assessed the possibility or attributes of a state-wide allocation of the incremental costs associated with the submarine-ing. Finding 26. It certainly warranted, and still warrants, examination, no matter the Department's (mis)apprehension that no party supported it. *Id.* at 20. ¹⁴ Tr. 7/8/05(a) at 85; tr. 7/8/05(b) at 89-90.

G. 30 VSA §248(b)(10): Planned or Existing Transmission

The record does not establish whether alternatives to the project can be served economically by existing transmission facilities without undue adverse impact on Vermont utilities or customers.

IV. Conclusion with Respect to 30 VSA §248(a)(2): General Good of the State

The foregoing reasons, we urge the Board to conclude that the LCP does not promote the general good of the state and to direct the Petitioners to take the actions we have recommended. If, however, the Board does conclude that the LCP will promote the general good of the state, we urge it to apply the conditions to that approval that we have enumerated above.

Dated at Waterbury, Vermont, this 8th day of August, 2005, on behalf of the Selectboard of the Town of Waterbury and the Trustees of the Village of Waterbury.

Frederick W. Weston III Chair Waterbury Planning Commission

cc: Docket 7032 Service List